

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P230485

Luminaire Tested: **24CZ-LD5-60-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230485  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-60-RDP-UNV-L935-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (168) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3457.8 lumens  
Efficiency: N/A  
Efficacy: 66.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

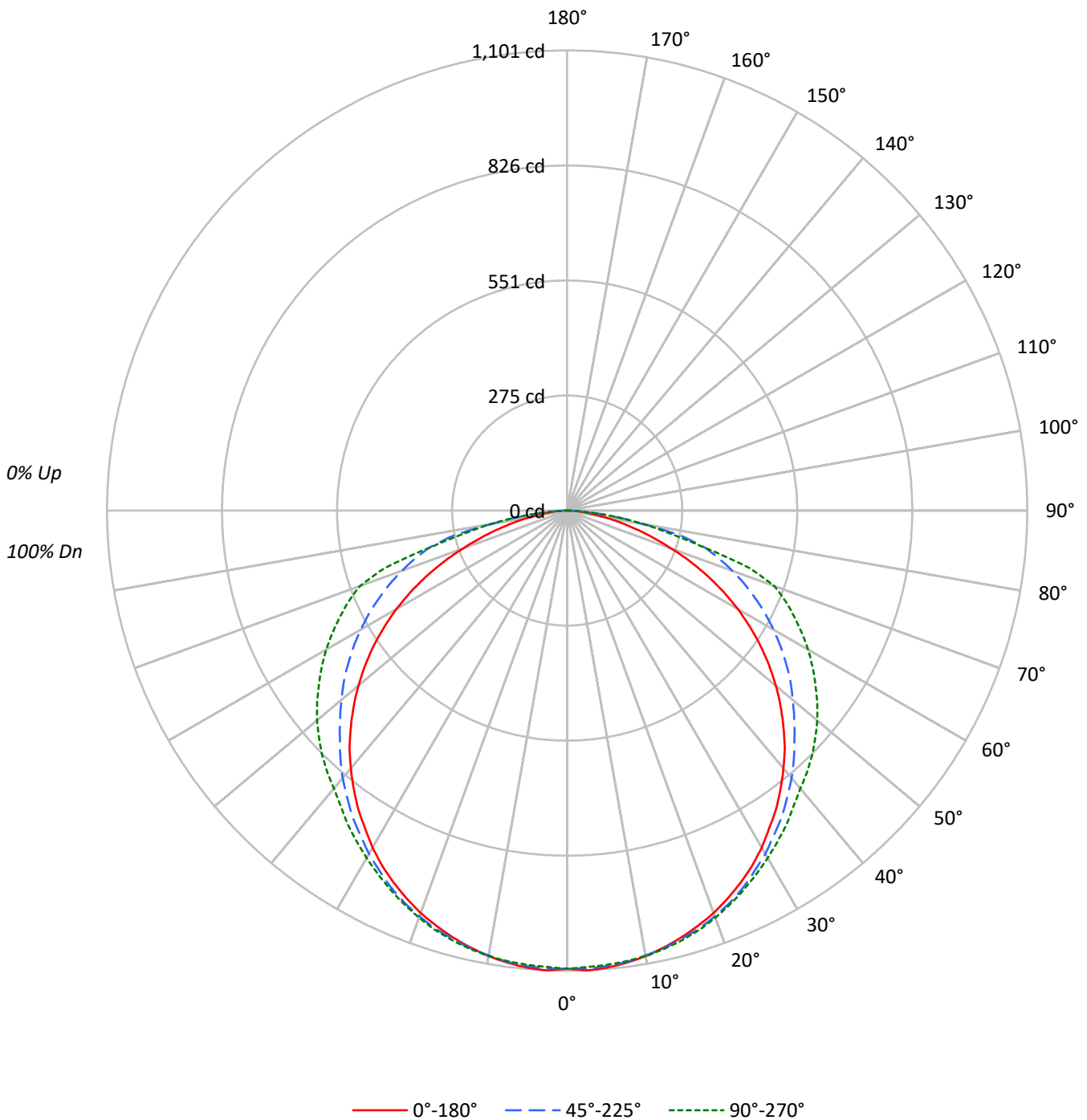
Input Watts (W): 52.17  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20				20			20	
RC	80				70				50			30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82	82	
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67	67	
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56	56	
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47	47	
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41	41	
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35	35	
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31	31	
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27	27	
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25	25	
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22	22	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1475	1475	1475
5°	1483	1478	1474
10°	1479	1477	1479
15°	1472	1477	1482
20°	1467	1479	1484
25°	1458	1478	1486
30°	1446	1473	1491
35°	1431	1471	1504
40°	1414	1468	1525
45°	1393	1464	1577
50°	1365	1475	1635
55°	1326	1501	1701
60°	1269	1534	1791
65°	1181	1582	1907
70°	1044	1654	2076
75°	876	1770	1743
80°	699	1398	1450
85°	551	946	868



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.0	3.0
10°-20°	299.2	8.7
20°-30°	457.0	13.2
30°-40°	558.7	16.2
40°-50°	598.1	17.3
50°-60°	573.7	16.6
60°-70°	484.4	14.0
70°-80°	309.5	9.0
80°-90°	73.2	2.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	860.2	24.9
0°-40°	1418.9	41.0
0°-60°	2590.6	74.9
0°-90°	3457.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3457.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1098	1091	1094	1093	1091	104
15°	1057	1054	1060	1064	1064	298
25°	982	980	996	999	1001	453
35°	872	878	895	907	916	545
45°	732	744	769	805	829	565
55°	565	584	640	698	725	504
65°	371	407	497	567	599	366
75°	168	240	340	347	335	181
85°	36	60	61	60	56	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1096.1	1096.1	1096.1	1096.1	1096.1
2.5°	1101.3	1094.4	1096.1	1096.1	1092.7
5°	1097.8	1091.0	1094.4	1092.7	1091.0
7.5°	1091.0	1085.9	1089.3	1089.3	1087.6
10°	1082.5	1077.4	1080.8	1082.5	1082.5
12.5°	1070.6	1067.2	1072.3	1072.3	1074.0
15°	1057.0	1053.6	1060.4	1063.8	1063.8
17.5°	1041.7	1040.0	1048.5	1050.2	1051.9
20°	1024.7	1023.0	1033.2	1033.2	1036.6
22.5°	1004.2	1002.5	1016.1	1016.1	1019.6
25°	982.1	980.4	995.7	999.1	1000.8
27.5°	958.3	956.6	971.9	977.0	980.4
30°	931.0	931.0	948.1	954.9	960.0
32.5°	900.4	905.5	920.8	931.0	937.9
35°	871.5	878.3	895.3	907.2	915.7
37.5°	839.1	845.9	864.7	880.0	890.2
40°	805.1	813.6	835.7	852.7	868.1
42.5°	771.0	779.6	803.4	828.9	849.3
45°	731.9	743.8	769.3	805.1	828.9
47.5°	692.8	704.7	737.0	781.3	805.1
50°	651.9	665.5	704.7	755.7	781.3
52.5°	609.3	624.7	674.0	728.5	754.0
55°	565.1	583.8	640.0	697.9	725.1
57.5°	519.1	539.6	605.9	667.2	696.2
60°	471.5	497.0	570.2	634.9	665.5
62.5°	422.1	452.8	534.5	600.8	633.2
65°	371.1	406.8	497.0	566.8	599.1
67.5°	318.3	365.9	459.6	532.8	565.1
70°	265.5	321.7	420.4	495.3	527.6
72.5°	216.2	280.8	381.3	451.1	457.9
75°	168.5	240.0	340.4	347.2	335.3
77.5°	126.0	199.1	280.8	250.2	248.5
80°	90.2	160.0	180.4	185.5	187.2
82.5°	59.6	120.8	117.4	120.8	119.1
85°	35.7	59.6	61.3	59.6	56.2
87.5°	17.0	22.1	17.0	15.3	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)